

## The Influence of Social Media on the Health Seeking Behaviour of University Students

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### Abstract

Social media is an internet-based form of communication that allows users to share information, create web content and have conversations. Some of the popular social media platforms include Facebook, WhatsApp, Instagram, Twitter, YouTube, LinkedIn, Telegram, Snapchat, etc. This study aimed to establish how students use social media platforms to access health information. A cross-sectional survey design with a randomized sampling technique was employed. The research was conducted in 2019. Open and closed-ended questionnaires were used to assess the responses. The study found that all the 354 (100%) respondents were active internet users with an account to at least one social media platform. The majority of them had an account on more than one social media platform. A total of 64 (18.1%) people answered in the affirmative to ever being influenced by social media to start medication or treatment, while 39 (11%) also responded positively to being influenced by social media to stop medication or treatment. The study found that out of the 354 completed questionnaires, only 134 respondents always discussed the authenticity of health-related information obtained on social media with health professionals. Based on the results of this study, it can be concluded that majority of university students are active users of social media. Many university students access health information on social media and a considerable number of them relies on information obtained from social media to make decisions concerning their health, such as starting or stopping treatment or medication.

**Keywords:** Social Media; Health Information; University Students

### Introduction

According to Kim et al., “social media are the emerging digital communication channels which create a user-oriented information sharing ground where any people can generate or subscribe information content as both information provider and consumer”[1]. Buettner describes social media as “computer mediated tools that allow people or companies to create, share and exchange information, career interest, ideas, pictures/virtual communities and networks”[2]. Social media is an internet-based form of communication that allows users to share information, create web content and have conversations. Some of the popular social media platforms include Facebook, WhatsApp,

Instagram, Twitter, YouTube, LinkedIn, Telegram, Snapchat, etc. The popularity of social media platforms has surged because of the ease with which one can connect to family and friends on these platforms[3]. Thus, social media has come to revolutionize the way people access and share information. The advent of personal computers, smartphones and high-speed internet connectivity has contributed to the increase in the number of accounts on these social media platforms making information sharing very rapid and effective. According to an article by Korda and Itani (2013), social media is a great tool for health information sharing despite some user challenges [4].

Most social media users are young people who have had some level of education and knowledge on how to navigate the internet [5]. However, a lot of people in developing countries, especially Africa are denied this world of information sharing because of the lack of resources needed to access information from these sources [6]. They are not able to access and use the vast amount of health information being shared on the internet or social media platforms, hence they tend to miss the latest information on common illnesses in their communities. Also, the few who can access social media or the internet to search for health information are exposed to a vast amount of restrictions as well as inaccurate and inconsistent information because of the inadequate number of certified sites which provide credible and reliable health information and expert advice [7].

Health seeking behaviour (HSB) can be defined as the means by which individuals search for information concerning their health, risks, illnesses, and health-protective behaviors [8]). It has been noted that people who search for health information on the internet are likely to make changes to decisions concerning their health. People's HSB could be motivated by the perception of their health, current health status, and family health history. Nonetheless, Kam, Stanszus, Cheah, Heerasing, and Tie (2010) noted the lack of studies with a primary emphasis on the use of internet as a source of health information by university students. In view of this, university students represent an important target for digital health interventions. Hence, exploring the utilization of social media by this unique group is important [9].

Online HSB is explained by both psychological and social factors [10]. Health anxiety, self-efficacy, internet-efficacy, and neuroticism have been identified as psychological factors that predict the use of the internet/web for health information seeking [12]. Social, demographic, and lifestyle factors linked to online health information seeking include being female, higher educational achievement, and age [8,11].

The results of a study by Jacobs, Amuta and Jeon (2017) indicated that access to health information was based on a person's age, race and socioeconomic status [10]. Another study by Levac and O'Sullivan (2010) also posited that social media has the potential to reach many people and to empower them to take decisions on their health [11].

This study aimed to establish how university students use social media platforms to access health information.

## **Methodology**

Cross-sectional survey design technique was used for this research. The research was conducted in 2019. The population consisted solely of about seventeen thousand university students. Students who did not belong to any social media platform were excluded from this research. Participants were randomly selected based on their availability during a lecture period.

Questionnaires, which included both closed and open-ended questions, were used to gather the responses from the participants. The questions were derived from the aim of the research. The questionnaire had two parts, the first part was called, "Usage and type of social media users", while the second part was named, "Habits of social media users regarding health-related information received on social media platforms". Three hundred and fifty-four (354) people responded to the questionnaire. Frequencies and percentages were generated using SPSS.

## Results

Out of the 354 respondents, 207 were males, (58.5%) and 147 were females, (41.5%). The majority of the respondents (206) were between 21 – 25 years old(58.2%) followed by the 15-20years age group with 121(34.2%) of the respondents whilst 26 (7.3%) of them were in the 26 – 30 years age group. The 31 – 35 years age group had 1 (0.3%) respondent thus being the smallest. The mean age was 21.9 ( $\pm$  2.5) years. Out of the 354 respondents, 351(99.2%) answered yes to using WhatsApp, 274 (77.4%) used Facebook, 156 (44.1%) used Twitter, 221 (62.4%) used Instagram, 51 (14.4%) used LinkedIn and 65 (18.4%) used other social media platforms in addition to those listed in the questionnaire.

**Table 1.** Background characteristics of respondents

Characteristic	Result
Sex, no. (%)	
Male	207 (58.5)
Female	147 (41.5)
Age group, no. (%)	
15-20	121 (34.2)
21-25	206 (58.2)
26-30	26 (7.3)
31-35	1 (0.3)
Mean age, years	21.9

Out of the four most popular social media platform(s) (WhatsApp, Facebook, Instagram and Twitter) in the Ghanaian university, WhatsApp had the highest number of respondents (282) who answered “yes” to receiving health-related information on that platform. Facebook had the second highest (197) and Twitter had the least (92). Meanwhile, 185 (52.3%) of the participants answered “never” to whether the authenticity of health-related information obtained from social media was discussed with health professionals, 64 (18.1%) answered “yes”, 290 (81.9%) answered “no” to ever starting treatment based on information from social media while 39 (11%) and 315 (89%) answered “yes” and “no”, respectively, to whether they ever stopped treatment based on information obtained from social media. WhatsApp had the most influence on people starting or stopping medication or treatment, followed by Facebook. In total, 28 (7.9%) people started treatment whilst 20 (5.6%) people stopped treatment as a result of information obtained from WhatsApp. One hundred and seven two (48.6%) answered “yes” to ever sharing health-related information while 182 (51.4%) participants answered “no” to this question. However, regarding having a system for verifying the information they share on social media, only 69 (19.5%) answered “yes” while 105 (29.7%) answered “no”. The question did not apply to 180 (50.8%) of the respondents who have never shared any health-related information on social media. The results of the study are summarized in Table 2.

## Discussion

This study found that all the 354 (100%) respondents were active internet users and all of them had at least one social media platform, most of them using more than one such platform. A considerable number of the respondents also answered “yes” to receiving health-related information on social media sites, which agrees with a study conducted in Ghana by Otu (2015), which reported that 100% of the respondents used social media. The results of our study show that majority of students access health information using WhatsApp (79.7%), followed by Facebook (55.6). This implies that social media holds an enormous potential as a means of health education and promotion.

**Table 2.** Social media use to access health information, expressed as number and percentages

	Result
Platform respondents	
WhatsApp	351 (99.2)
Facebook	274 (77.4)
Twitter	156 (44.1)
Instagram	221 (62.4)
LinkedIn	51 (14.4)
Social media for health information	
WhatsApp	282 (79.7)
Facebook	197 (55.6)
Twitter	92 (26.0)
Instagram	134 (37.9)
Ensured authenticity of information	
Always	15 (4.2)
Sometimes	119 (33.6)
Never	185 (52.3)
Not applicable	35 (9.9)
Ever influenced by social media to start treatment	
Yes	64 (18.1)
No	290 (81.9)
Ever influenced by social media to stop treatment	
Yes	39 (11)
No	315 (89)
Ever shared health information on social media	
Yes	172 (48.6)
No	182 (51.4)
Ever checked the credibility of health information before sharing	
Yes	69 (19.5)
No	105 (29.7)
Not applicable	180 (50.8)

In total, 99.2% of the respondents used WhatsApp, followed by Facebook with 77.4%. LinkedIn had 51 (14.4%) users, which is the lowest among the social media sites listed in the questionnaire. This finding agrees with studies by Otu (2015) and Nsizwana, Ige and Tshabalala (2017) which indicated that most respondents used WhatsApp [13,14]. Moreover, research by Bhaskaran, Kumar and Janodia (2017) in India also found that WhatsApp was the most popular social media type, followed by Facebook [15]. All the participants in this study reported having accessed health information on social media at one point or at least once, however, there was some variation in the rate of health information access among the respondents.

The current study found that out of the 354 completed questionnaires, only 134 respondents reported always discussing the authenticity of health-related information obtained on social media with health professionals. Majority of the respondents, 185 (52.3%), said they never discussed the authenticity of health-related information on social media with a health professional. This finding is in direct contrast to the results of a study conducted in India by Bhaskaran, Kumar and Janodia (2017), which revealed that 71% of the respondents discussed health-related information obtained from social media with medical professionals. As compared to Ghana, India is a developed country and as such has a strong and well-structured health system with measures put in place to facilitate easy access to health professionals for discussing health-related issues. A considerable number of the respondents also cited other ways of checking the credibility of health-related information, such as textbooks, online and friends.

Our study also showed that a considerable number of the respondents were influenced by social media to either start or stop medication or treatment without the advice of a health professional. A total of 64 (18.1%) people answered in the affirmative to ever being influenced by social media to start medication or treatment while 39 (11%) also responded positively to being influenced by social media to stop medication or treatment. This finding agrees with a study in Ghana by Asibey,

Agyemang and Dankwah (2017), which found that 23.7% of the respondents were influenced by social media to change medication without consulting a professional [16]. This underscores the need for strengthened efforts geared towards the dissemination of credible and authentic health information on social media platforms to enable people to make the right decisions concerning their health, thus promoting good health and wellbeing.

One hundred and seventy-two respondents (48.6%) answered “yes” to ever sharing health information on social media, which indicates that an appreciable number of students are involved in circulating health information on social media. Thus, measures must ensure credible and reliable health information distribution on social media sites [7]. With regard to those who answered “yes” to ever sharing health-related information on social media, only 69 (19.5%) out of the 174 respondents have a system for verifying the credibility of health-related information before sharing it on social media. On the other hand, 105 (29.7%) of them do not verify the credibility of health-related information before sharing it on social media. This can pose a lot of danger to those social media users who depend on such information for making decisions on their health [17].

The results of this study show that many social media users access healthcare using the investigated social media. This presents a challenge to healthcare professionals, who must ensure that health information that circulates on social media platforms are authentic and useful.

### *Limitations*

This research concentrated solely on university students from one public university. The dynamics may change if the study was extended to other tertiary institutions. We also believe that the results of a nationwide study could reflect the use of social media for healthcare. The findings of this study cannot be extrapolated to a larger population.

### **Conclusion**

Based on the results of this study, it can be concluded that many university students access health information on social media and a considerable number of them relies on such information to make decisions concerning their health, such as starting or stopping treatment or medication. An appreciable number of university students are also involved in sharing health-related information on social media with just a small number ensuring that the information they share are credible.

### **Conflict of Interest**

The authors declare that they have no conflict of interest.

### **References**

1. Kim Y, Hall H, Kim M, Kim K. Factors Influencing the Adoption of Social Media in the Perspective of Information Needs. iConference 2010; February 3-6, 2010. Available from: <https://www.ideals.illinois.edu/bitstream/handle/2142/15025/iConference2010-Poster-SocialMediaAdoption-Final.pdf?sequence=3>
2. Buettner R. Getting a Job via Career-oriented Social Networking Sites : The Weakness of Ties. *Electronic Markets* 2017;27:371-85.
3. Kaplan AM, Haenlein M. Social media: Back to the roots and back to the future. *J Syst Inf Technol.* 2012;14(2):101-104.
4. Korda H, Itani Z. Harnessing Social Media for Health Promotion and Behavior Change. *Health Promot Pract.* 2013;1:15-23.
5. Pálsdóttir Á. Preferences in the use of social media for seeking and communicating health and lifestyle information. *Inf Res.* 2014;19(4):1-16.
6. Counted AV, Arawole JO. ‘We are connected, but constrained’: internet inequality and the

- challenges of millennials in Africa as actors in innovation. *J Innov Entrep.* 2015;5(3):1-21.
7. Dalmer NK. Questioning reliability assessments of health information on social media. *J Med Libr Assoc.* 2017;105(1):61-8.
  8. Lambert SD, Loiselle CG. Health information-seeking behavior. *Qual Health Res.* 2007;17(8):1006-19.
  9. Kam J, Stanszus D, Jie C, Haerasing N, Tie SY. The Internet as a health information source for university students | *Australian Medical Student Journal.* Aust Med Student J [Internet]. 2010 [cited 2019 Sep 11]; Available from: <https://www.amsj.org/archives/284>
  10. Jacobs W, Amuta AO, Jeon KC. Health information seeking in the digital age: An analysis of health information seeking behavior among US adults. *Cogent Soc Sci.* 2017;3:1302785. doi: 10.1080/23311886.2017.1302785.
  11. Levac J, O'Sullivan T. Social Media and its Use in Health Promotion. *International Journal of Health Sciences* 2010;1(1):47-53.
  12. Lague C, Atkin D. Health anxiety in the digital age: An exploration of psychological determinants of online health information seeking. *Comput Human Behav.* 2015;52:484-91.
  13. Otu AA. Social media addiction among students of the university of ghana akua adoasi otu a long essay submitted to the university of ghana in partial fulfillment of the requirements for the award of a master of arts degree in communication studies [Internet]. 2015 [cited 2019 Sep 11]. Available from: <http://ugspace.ug.edu.gh>
  14. Nsizwana SC, Ige KD, Tshabalala NG. Social Media Use and Academic Performance of Undergraduate Students in South African Higher Institutions: The Case of the University of Zululand. *J Soc Sci.* 2017;50(1-3):141-152.
  15. Bhaskaran N, Kumar M, Janodia MD. Use of Social Media for Seeking Health Related Information – An Exploratory Study. *J Young Pharm.* 2017;9(1):118-21.
  16. Asibey BO, Agyemang S, Dankwah AB. The Internet Use for Health Information Seeking among Ghanaian University Students: A Cross-Sectional Study. *Int J Telemed Appl.* 2017;2017:1756473. Doi: 10.1155/2017/1756473
  17. El-Badawy TA, Hashem Y. The Impact of Social Media on the Academic Development of School Students. *Int J Bus Adm.* 2015;6(1):46-52.